

# Bovine Spongiform Encephalopathy in North America

August 23, 2006



The current theory is that Bovine Spongiform Encephalopathy (BSE) entered North America through cattle imported from the United Kingdom (UK) during the 1980's; 182 UK cattle were imported directly into Canada and 300 into the US from 1982 to 1990. Native cattle were most likely exposed to BSE by eating a ration containing meat and bone meal contaminated with infectious material.

## Animal Feed Controls

In 1997, both the US and Canada introduced measures to safeguard cattle feed. In October 2005, the Food and Drug Administration proposed a rule to strengthen US animal feed controls. The proposal would ban the use in **all animal feed** of cattle parts most likely to spread BSE, including:

- Brain and spinal cord from cattle 30 months of age and older
- The entire carcass of cattle not passed for human consumption if the brain and spinal cord have not been removed
- Tallow from prohibited materials that contains more than 0.15% insoluble impurities, and
- Mechanically separated beef.

In June 2006, Canada published a rule that, effective July 2007, will ban specified risk materials from all animal feeds, pet foods and fertilizer.

## What Should Producers Do?

- Comply with feed bans - **do not feed products containing prohibited materials.**
- Keep copies of feed records including invoices and labels.
- Establish an individual animal identification plan for your herd, and keep records of when animals enter and leave the herd.
- **Report cattle with neurological signs to your veterinarian.**
- Dispose of carcasses appropriately, such as with a licensed renderer.
- Help to ensure that unsafe meat does not enter the human food chain.

## Twelve cases diagnosed in North America...

**Case 1:** In 1993, one of the UK cattle tested positive for BSE in Alberta, Canada, and was diverted from the human food and animal feed systems. Canada depopulated all of their remaining UK cattle.

**Case 2:** On May 20, 2003, Canada confirmed BSE in a six-year-old Angus cow born in Saskatchewan. The cow did not enter the human food chain; the remains entered the feed system through a rendering facility in

Alberta. The herd of origin and other animals of interest were slaughtered: more than 2,700 cattle were culled and over 2,000 tested negative for BSE.

**Case 3:** On December 25, 2003, the USDA confirmed BSE in a six-year-old Holstein cow in Washington State. The cow was born in Alberta and entered the US in 2001 as part of a shipment of 81 animals. Over 255 cattle were depopulated from 10 premises; all tested BSE negative.

**Case 4:** On January 2, 2005, BSE was confirmed in an eight-year-old Holstein cow born in Alberta. No part of the cow entered the human or animal food chain. Over 130 animals were traced; those located alive were culled and tested negative for BSE.

**Case 5:** On January 11, 2005, BSE was confirmed in a six-year-old Charolais cow born in Alberta. No part of the animal entered the human or animal food chain. Over 350 animals were investigated, and 41 were culled and tested negative for BSE.

**Case 6:** On June 24, 2005, BSE was confirmed in a 12-year-old Brahma-cross cow born in Texas. No part of this animal entered the human or animal food chain. Over 200 cattle were investigated.

**Case 7:** On January 23, 2006, BSE was confirmed in a six-year-old Holstein-Hereford cross cow in Alberta. No part of the animal entered the human or animal food chain. A total of 156 cattle were investigated.

**Case 8:** On March 13, 2006, BSE was confirmed in a ten-year-old crossbred beef cow in Alabama, US. The investigation was unable to find any related animals except for the two most recent calves.

**Case 9:** On April 16, 2006, BSE was confirmed in a six-year-old Holstein cow from British Columbia.

**Case 10:** On July 4, 2006, BSE was confirmed in a 15-year-old crossbred beef cow from Manitoba.

**Case 11:** On July 13, 2006, BSE was confirmed in a 50-month-old dairy cow from Alberta.

**Case 12:** On August 23, 2006, BSE was confirmed in an eight to ten-year-old beef cow from Alberta.

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